REMARKS

In the office action of January 5, 2005, claim 6 was rejected for lack of enablement and indefiniteness. Claims 4-7 were objected to for erroneous dependencies. Claims 1-5 and 7-8 were rejected under 35 USC 102(b) as anticipated by Snyder et al. (US 303, 334). Claim 6 was rejected under 35 USC 103(a) as being unpatentable over Snyder et al. in view of Adams, Jr. et al. (US Patent Application Publication, Pub. No. 2003/0058250.

Claim 6 has been cancelled.

Claims 4-5 and 7 have been amended to properly depend on claim 3.

The rejection of claims 1-5 and 7-8 is respectfully traversed since Snyder et al. does not disclose each and every limitation of these claims.

For example, Snyder et al. does not show:

> partitioning a half-toned bit map into a plurality of N-pixel tiles, each N-pixel tile having a marked pixel count M, and wherein the half-toned bit map is produced pursuant to a predetermined half-toning procedure;
>
> comparing each N-pixel tile to a corresponding N-pixel reference tile that comprises a half-toned binary pattern that would be produced by the predetermined half-toning procedure for such N-pixel tile if the portion of a pre-half-toned data that resulted in such N-pixel tile were of uniform lightness;
>
> identifying an N-pixel tile as comprising a portion of a half-toned uniform region if it matches the corresponding N-pixel reference tile.

As to the Office Action contention that Snyder et al. discloses a method for detecting a portion of a half-toned uniform area, it is respectfully submitted that Snyder et al. discloses apparatus and method for rendering graphic images as bit maps. Snyder et al. does not disclose a method for detecting a portion of a half-toned area.

As to the Office Action contention that Snyder et al. Col. 4, lines 55-68, Col. 11, lines 19-24, and Col. 13, lines 21-37 teach partitioning a half-toned bit map into a plurality of N-pixel tiles, each pixel tile having a marked pixel count M, and wherein the half-toned bit map is produced pursuant to a predetermined half-toning procedure, those portions of Snyder et al. state:

> Using the PostScript system, a filled region is divided into graphic primitives and these primitives are displayed as output. FIG. 3 illustrates an arbitrary region 40 bounded by outlines 41 and 42. An outline can be described generally as a series of lines or curves defining the edge of a region to be displayed. The resolution of the lines or curves can be selected to be lower for a relatively low-resolution display and higher to render finer details. The image of each filled region to be rendered can be divided into segments, e.g., horizontal segments, bounded by essentially straight edges of an outline to make trapezoids, run-arrays or other appropriate geometric figures in order to build a complete region. (Col. 4, lines 55-68).
>
> Another boundary condition occurs when the current rendering operation reaches the end of the current row in the current screen, whereupon the MCS 20 calculates the starting screen tile number, row number and starting pixel position within the screen tile. (Col. 11, lines 19-23)

> Using this mechanism, an area can be filled with an evenly screened gray level. A preset gray level can be stored in a register and compared against each threshold pixel value, aligning scan lines as before. If the gray level is less than the threshold level, the output pixel will be marked black. If the gray level is equal to zero (dark), each output pixel is marked black. If the gray level is equal to FF (light), each output pixel is marked white. One skilled in the art will recognize how to choose dark versus light colors on the appropriate output device and can utilize this method accordingly. In a preferred embodiment, GCP 10 can be set to output either "white" or "black" when an output pixel is a logical 1. Thus by simply changing one flag, an entire region or portion of a region can be reversed black for white or vice versa. (Col. 13, lines 21-37).

It is respectfully submitted that these portions of Snyder et al. do not teach partitioning a half-toned bit map into a plurality of N-pixel tiles, each N-pixel tile having a marked pixel count M, and wherein the half-toned bit map is produced pursuant to a predetermined half-toning procedure.

As to the Office Action contention that Snyder et al. Col. 13, lines 21-37 teaches comparing each N-pixel tile to a corresponding N-pixel reference tile that comprises a half-toned binary pattern that would be produced by the predetermined half-toning procedure for such N-pixel tile if the portion of a pre-half-tone data that resulted in such N-pixel tile were of uniform lightness, that portion of Snyder et al. is quoted above and relates to filling an area with a screened gray level. It is respectfully submitted that such portion of Snyder et al. does not teach comparing each N-pixel tile (of a half-toned bit-map) to a corresponding N-pixel reference tile that comprises a half-toned binary pattern that would be produced by the predetermined half-toning

procedure for such N-pixel tile if the portion of a pre-half-toned data that resulted in such N-pixel tile were of uniform lightness.

As to the Office Action contention that Snyder et al. Col. 13, lines 21-37, and Col. 2, lines 29-44, teach identifying an N-pixel tile as comprising a portion of a half-toned uniform region if it matches the corresponding N-pixel reference tile, that portion of Col. 13 is quoted above, and Col. 2, lines 29-44, of Snyder et al. states:

> Substantially simultaneously and for each one of a plurality of the raster device pixels, if the region is to be filled with a selected gray level, correlating the one raster device pixel with a corresponding threshold value in a reference array of threshold values, the reference array of threshold values corresponding to an array of pixels in a halftone screen pattern, then comparing the selected gray level with the corresponding threshold value and rendering the region by setting device pixel data for the raster device pixel according to its corresponding threshold value, the selected gray level and the second digital input command, whereby the region is filled with device pixel data to form a halftone screen pattern. Alternatively, if the region is to be filled with a solid color, the region is rendered by setting device pixel data for the one raster device pixel to represent the solid color and outputting the device pixel data in a form suitable for a raster display device or a raster marking engine. (Col. 2, lines 29-48).

These portions of Snyder et al. relate to filling an area with a screened gray level. It is respectfully submitted that these portions of Snyder et al. do not

teach identifying an N-pixel tile as comprising a portion of a half-toned uniform region if it matches the corresponding N-pixel reference tile.

As to the office action's reliance on Snyder et al. Col. 13, lines 21-37, and Col. 2, lines 29-44, in regard to claim 2, those portions of Snyder et al. are quoted above and relate to filling an area with a screened gray level. It is respectfully submitted that these portions of Snyder et al. do not teach comparing each N-pixel tile to an associated N-pixel reference tile that comprises a half-toned binary pattern that would be produced by the predetermined half-toning procedure for such N-pixel tile if the portion of the original data that resulted in such N-pixel tile were of uniform lightness, wherein the N-pixel reference tile includes the same number of marked pixels M as the N-pixel tile to which it is being compared.

As to the Office Action's reliance on Snyder et al. Col. 12, lines 23-35; Col. 13, lines 21-22; Col. 13, lines 21-37; and Col. 2, lines 29-44, in regard to claim 5, those portions of Cols. 13 and 2 are quoted above, while that portion of Col. 12 states:

> PIX 28 includes a threshold comparator which is invoked when the fill is gray or an image halftone pattern. Referring to FIG. 4, a region 54 to be scaled and filled with one or more gray levels is rendered as a series of halftone cells 53 computed using threshold array data from screen RAM 12. The threshold comparator in PIX 28 tests each pixel in the source image (source pixel) against a geometrically corresponding value in the threshold array and outputs a device pixel of a first binary value if the source pixel value exceeds the threshold value and otherwise outputs a device pixel of the other binary value, thereby filling a region, e.g., region 55. (Col. 12, lines 23-35).

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It is respectfully submitted that these portions of Snyder et al. do not teach comparing each N-pixel tile to an associated N-pixel reference tile that comprises a half-toned binary pattern that would be produced for such N-pixel tile pursuant to the predetermined threshold value array if the portion of the original data that resulted in such N-pixel tile were of uniform lightness, wherein the pixels of the N-pixel reference tile are filled pursuant to a fill order that is based on the half-tone threshold values that produced such N-pixel tile.

As to the office action reliance on Col. 12, lines 23-35; Col. 13, lines 21-22; and Col. 20, lines 25-29, in regard to claim 7, those portions of Columns 12 and 13 have been quoted previously, while Col. 20, lines 25-29 states:

> The pseudo-random noise generators can be selectively turned on or off. This can be used for fixed gray level fills or for image fills as well as for blends.

It is respectfully submitted that these portions of Snyder et al. do not teach comparing each N-pixel tile to an associated N-pixel reference tile that comprises a half-toned binary pattern that would be produced for such N-pixel tile pursuant to the predetermined threshold value array if the portion of the original data that resulted in such N-pixel tile were of uniform lightness, wherein the pixels of the N-pixel reference tile are filled pursuant to a fill order pattern of fill order values that comprise a sequence that corresponds to a relative ordering of the half-tone threshold values that produced such N-pixel tile, wherein the fill order values are between 1 and N.

Reconsideration is respectfully requested in view of the foregoing.

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Although no additional fee is believed to be required for this response, the undersigned Xerox Corporation attorney hereby authorizes the charging of any necessary fees, other than the Issue Fee, to Xerox Corporation Deposit Account No. 24-0025.

If the Examiner considers personal contact advantageous to the disposition of this case, please call Applicant's attorney, Manuel Quiogue at 503.685.4229 or fax him at 503.685.4223.

Respectfully submitted,

Manuel Quiogue
Attorney for Applicant(s)
Registration No. 26,978
Tel. 503.685.4229
Fax 503.685.4223

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